DOCUMENT RESUME

ED 176 885 PS 010 916

AUTHOR Paget, Katherine Frome
TITLE Reemphasizing the Social in Social Cognition.
PUB DATE Sep 79
NOTE 15p.; Paper presented at the Annual Meeting of the American Psychological Association (87th, New York, New York, September 1-5, 1979)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Adolescents; Attribution Theory; Children; *Developmental Psychology; *Developmental Stages; *Individual Development; *Perspective Taking; Research Methodology; Social Development
IDENTIFIERS Habermas (J); *Person Perception; *Social Cognition; Symbolic Interaction Theory

ABSTRACT

Research in developmental social cognition should detail commonalities between self and other as well as the self-other differentiation process. A method which indexed developmental changes in the understanding of both intersubjective rules of interpersonal behavior and subjective individual perspectives was devised to research questions concerning (1) the relation between causal inferences and formal operational thinking skills or context dependency, and (2) the relationship between perspective taking-ability and person perception. Boys and girls clearly characterized by either concrete operational transitional, and fully formal operational skills were formed into sex balanced groups of 20 subjects each. Cognitive ability level was assessed and the vocabulary subtest on the WISC or the WAIS was administered. Subjects were then individually presented three fairy-tale segments, with pictorial sequences. The stories chosen included causal chains of events which were available to the subject, but which lent themselves to different interpretations by characters in the stories. Each subject was asked to retell the story as presented to him or her, relate the story first from the perspective of the protagonist and then from that of a late-arriving bystander, and answer questions after each story. Story reconstructions were content analyzed. Among the results, formal operational subjects were more interpretive and psychological in their responses than both their concrete and transitional counterparts. Concrete and transitional subjects did not significantly differ. (Author/RH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED176885

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Reemphasizing the Social in Social Cognition

Katherine Frome Paget

Eliot-Pearson Department

of Child Study

Tufts University

Paper presented on the Symposium

"Contemporary Approaches to the Study

of Children's Social Development"

at the 87th meeting of the American

Psychological Association,

September, 1979, New York City

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Katherine Frome Paget

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

PS010916

The research I would like to share with you today was prompted by growing concern in the area of developmental social cognition over our restricted research focus. Blasi and Youniss have critiqued this topical area in terms of its over-emphasis on social perspective-taking as the focal assessment technique. Blasi has argued that social perspective-taking tends to fragment the personality of self and other and is unable to deal with the most important area of social cognition, namely, the contents of personality. Furthermore, social perspective-taking is unable to explain more mature and mutual forms of social knowing. In a similar vein, Youniss has argued that perspective-taking overemphasizes the opposition of self and other and recommends that relations between persons be our target of study. In Chandler's 76 review of the social-cognitive literature he argues that within this area, investigators have focused either on distorting assimilation or subject-free accomodation, and the resulting picture of socio-cognitive development is less equilibrated than might have been hoped.

These three critiques converge with respect to their conclusions that, to date, social cognition research has presented us with but a sketchy representation of this multifacted process. A personal, solitary quality rather than a social one better characterizes this research area, since the progressive differentiation of self and other has served as the conceptual underpinning for the bulk of measurement techniques.

A potential remediating strategy for studying such development, and the one I offer today for your consideration, is to begin by conceptualizing the way in which children come to understand their social world in terms of knowing about commonalities between self and other as well as the important self-other differences Persons living in a common culture share a common meaning system, and behave in ways which reflect this intersubjectivity. The importance of this idea is illustrated in the work of the symbolic interactionists and J. Habermas, among others. Habermas writes "...the ego as person is like to all other persons, but

is absolutely different as an individual from all other individuals." Within this conceptual framework, inferences about the behavior and subjective states of other persons would involve not only the ability to differentiate the perspective of self from other, but also the ability to conceptualize the rules of human behavior as exhibiting some cohesion since they refer to a specific category of interacting organisms. Accordingly, the detailing of commonalities between self and other would offer the needed complement to the self-other differentiation process. Put differently, the ground necessary to complete the figure-ground configuration would be supplied.

It would not seem unreasonable to expect that children's developing ability to understand personhood, interpersonal relations and psychological causality would follow the trajectory of organizational elaboration predicted by cognitive-developmental theory. The result of such a direction would provide us with a more equilibrated description of social cognitive development and one which has an inherently more "social" flavor.

Given these considerations, the task became one of constructing a method by means of which one could index developmental changes in the understanding of both general rules of interpersonal behavior and subjective individual perspectives. Two lines of theory and method were integrated into the perspective-taking paradigm in an attempt to meet this purpose: attribution theory and person perception research. H.H. Kelley's social attribution theory suggests that the social inferences made by adults on the basis of limited data reflect various patterns of causal schemata. Social inferential ability in adults, according to Kelley, is structurally similar to the analysis of variance cube, experimental method, and the logical reasoning abilities characteristic of persons at the Piagetian stage of formal operations. From a developmental perspective, one might explore the differences in complexity of social causal reasoning which children at various stages of cognitive functioning are capable of. Elkind has termed the propensity of young adolescents to opt for their own social hypotheses even when presented

with contradictory information "assumptive psychologies." Greater equilibration between assumption and fact is achieved as the adolescent uses his newly acquired formal operational skills. The term "assumptive psychologies" has been borrowed from Elkind but used to mean the implicit personality theory or naive psychology of the developing child. As such, perspective-taking ability, social causal reasoning and person perception combine to constitute "assumptive psychologies." Researchers of developmental person perception such as Livesley and Bromley, Flapan and Barenboim among others have effectively used the method of content-analyzing children's descriptions of self and other to demonstrate that with increasing age, children tend to employ psychological dispositions, motives and intentions in their descriptions. According to these studies, early adolescence is when psychological inference and recursive thinking fully blossom and marks a period of development which has not received its share of social cognitive research attention, when compared with the childhood focus of the perspective-taking literature and the young adult focus of research on social attribution.

In order to explore the development of children's "assumptive psychologies" a task was devised which is a hybrid of several commonly used methodologies. The Chandler social role-taking paradigm was expanded and scored for social causal reasoning complexity, and depth of person perception as well as cognitive egocentrism. The expansion of the social role taking task was 2 fold: First, the protagonist in the story sequence as well as the late arriving bystander was importantly uninformed about a critical aspect of his interpersonal behavior. Research questions concerning role and understanding of defensive lack of self-awareness were explored according to this expansion. Due to limited time, however, it is the second expansion I would like to focus upon today. While the late-arriving bystander may be uninformed about the particular antecedents of a behavioral event, he has witnessed the behavior, and may be expected to interpret the event with whatever means he has to do so. Such interpretations and inferences based on limited data were examined from a cognitive-developmental perspective.

Specifically, research questions included:

1. Are complex causal inferences the product of formal operational thinking skills?
2. Are simple inferences content-dependent?
3. What is the relationship between perspective-taking ability and person perception?
4. Is perspective-taking a necessary but not sufficient condition for person perception?

The design employed related the structural features descriptive of the logical capabilities of children and adolescents to counterpart complexities of public and private sectors in event sequences, with the anticipation of detailing developmental regularities and changes in the understanding of social events. The analysis of variance design consisted of three levels of cognitive ability (concrete operational, transitional formal operational and fully formal operational) and sex as the between groups factors. The three stories served as the within group factor.

The subjects of this study were 60 children and adolescents selected from a larger sample on the basis of their performance on screening procedures intended to establish their level of cognitive functioning. Testing was continued until 10 boys and 10 girls clearly characterized by either concrete operational, transitional formal operational and fully formal operational skills were chosen for inclusion. The mean age for the concrete operational group was 8.8 years; for the transitional group 12.7 years; and for the formal operational group 16.8 years. All subjects attended suburban public schools, were primarily caucasian, and from families of middle class socio-economic status.

Cognitive ability level was established by means of two assessment tasks: a test of combinatorial reasoning, closely patterned after a procedure described by Elkind (1968), and a second measure of formal operational thinking, an interpretation of proverbs test. In addition, all subjects were administered the vocabulary subtest on the WISC or the WAIS.

Eight year old subjects who failed to successfully complete both of the formal operational assessments were classified as concrete operational, 12 year old subjects who completed only one of the formal operational assessments successfully were classified as transitional formal operational, and 16-17 year old subjects who successfully completed both formal operational tasks were classified as formal operational.

Subjects in the sample were then individually presented a counterbalanced series of three fairy-tale segments, with accompanying pictorial sequences.

The three stories chosen included causal chains of events which were available to the subject, but which lent themselves to different interpretations by both the protagonist and the late-arriving bystander. In these episodes, an antecedent event causes the protagonist to act in a manner which indicates a lack of reflective self-awareness in the presence of a late-arriving bystander. The bystander, however, is uninformed of the occurrence of the antecedent event, and its potential causal staus in relation to the current behavior. The protagonist, although aware of the unique events comprising his own history, does not understand the significance of the antecedent events for his current behavior. The bystander, however, is aware of certain elements of the current event which the protagonist is not, namely, the out-of-role character and inappropriateness of the protagonist's behavior to which the bystander is witness. The observing subject is in full possession of the facts in both antecedent and current events, and with regard to protagonist's behavior toward the bystander, and the bystander's reaction to it.

The three stories used were Hans Christian Andersen fairytales: The Ugly Duckling, The Snow Queen and The Emperor's New Clothes. For example, in "The Ugly Duckling" story, the late-arriving flock of swans does not know that the young swan hiding in the grasses thinks he is ugly and expects persecution, and the reasons for the events leading up to this state of affairs. The young swan, however, does not know that he has been transformed over the winter

and that his present behavior reflects an incorrect and outdated self-perception. After listening to each story segment, the subject was asked to retell the story as presented to him and then relate the story from the perspective of the protagonist and then from that of the late-arriving bystander. The subject's story reconstructions were tape recorded as were their responses to seven probing questions which followed each story. Four of these questions, in their most content-free form, asked the subject to:

1. Identify what information is privileged and not available to the bystander in the story sequence.
2. Give reasons the bystander might give to explain the observed behavior.
3. Identify what is privileged and not available to the protagonist in the story sequence.
4. Give reasons the protagonist might give to explain (his) own behavior.

Scoring Procedures

a. Vignette Reconstructions: Person Perception

Story reconstructions were content analyzed by means of a category system adapted from the scoring employed by Livesley and Bromley (1973). On the most general level, statements were rated according to whether they a.) restated an event in the given text or b.) interpreted or inferred thoughts, motives or intentions which went above and beyond the given text.

Statements which merely restated events from the given text were termed "Reporting statements" and were derived from Livesley and Bromley's "Peripheral category."

Statements which reflected aspects of character's motives, thoughts, feelings or intentions which were not given in the behavioral text were termed "Interpreting-inferring statements" were derived from Livesley and Bromley's "Central" category.

In order to control for verbal fluency, proportional scores were derived in which statement type "Reporting" or "Interpreting-Inferring" served as

numerators, and total statements generated served as denominators. These ratio scores, as well as responses to questions were submitted to 3 x 2 x 3 multivariate analyses of variance, Duncan multiple range comparisons and tests of simple effects.

b. Social Inference

Responses to Questions 2 and 4 were scored according to whether inferences were "simple" or "complex" and within the category of simple, whether they were "personal" or "situational." A "personal" inference was defined as one which indicated that the reason for a behavior resided solely within the character, e.g. a personality trait such as "he was shy." A "situational" inference was defined as a statement which indicated that a behavior was a result of environmental constraint alone, e.g., "he did it because it was hot out."

Inferences were scored as complex if they indicated that the reason for a behavior was the joint result of personal and situational forces, e.g. "He always felt bad about himself, and because of this he assumed that they were going to tease him when they called out to him."

c. Egocentrism-Perspective-taking

Responses to questions were scored according to whether they indicated egocentrism or perspective-taking ability. Questions 1 and 3, "Does the character understand?" required a simple "yes" or "no" response. Questions 2 and 4 "How would the character explain this behavior?" required that the subject generate an inference which was free of egocentric contamination. The resulting dichotomously scored responses were analyzed by means of point-biserial correlations with cognitive level, the McNemar procedure for testing the differences between correlated proportions, and t tests.

Results

a. Person Perception

The ability to interpret manifest behavior in terms of covert psychological processes was expected to be characteristic of transitional and fully formal operational subjects, but lacking in concrete operational subjects. Content-

analyses of story reconstructions yielded a significant multivariate effect for cognitive level ($p < .001$), indicating developmental differences in statement type.

Formal operational subjects were more interpretive and psychological than both their concrete ($p < .01$) and transitional counterparts ($p < .05$). Concrete and transitional subjects did not differ ($p > .05$).

It was expected that the differences in statement type would vary as a function of whether subjects were asked to reconstruct stories from a specific perspective or not (Spontaneous).

More specifically, it was anticipated that the cognitively more mature subjects would rely on Interpreting-Inferring statements more often when cast in the Bystander or Protagonist role, in contrast to the Spontaneous role. Cognitive level exerted a strong main effect ($p < .001$) indicating developmental changes in the use of Interpreting-Inferring statements when subjects were requested to adopt a specific role, with both transitional and formal operational subjects using Interpreting-Inferring statements more frequently than concrete operational subjects. ($p < .01$). Transitional and formal operational subjects did not differ in this regard ($p > .05$).

b. Social Inference

Inferences concerning the reasons for behavior which subjects attributed to each of two roles were addressed in two major ways. First, the occurrence of complex and simple inferences was examined. Second, within the category of simple inferences, personal inferences were distinguished from situational inferences. It was hypothesized that complex inferential abilities would be present in the most cognitively mature group alone. No developmental hypotheses were generated concerning simple inferences. Rather, it was expected that simple inference type would operate purely as a function of story content.

a. Complex Inferences: A significant multivariate effect for cognitive level was clearly obtained for each role (Wilks' L = 4.64 $p < .001$). Specific contrasts revealed that formal operational subjects generated more complex inferences than concrete operational subjects ($t(54) = 2.01$ $p < .05$) but not significantly more than transitional subjects ($t(48) = 1.12$).

b. Simple Inferences: It was both anticipated and found that a) cognitive level had no effect on the use of simple inferences, but b) that story content stimulated both types of simple inferences.

c. Egocentrism-Perspective-taking

Finally, subjects were located along the egocentrism-perspectivism dimension. It was expected that cognitive perspective-taking success would be a function of a) cognitive level; b) the type of response required of the subject. Subjects were asked, you may recall, to make two different types of responses for each character. Response type I required a simple "yes" or "no" response on the part of the subject and success was anticipated for even the least cognitively mature group. Response type II required the subject to attribute inferences appropriate to story characters and cognitive level was expected to have an effect. Point-biserial correlations of perspective-taking success with cognitive level were performed, with cognitive level serving as the ordinal variable, and perspective-taking success serving as the nominal variable, and for response type I, correlations with cognitive level were negligible, ranging from .00 to .12. For response type II, perspective-taking scores were highly correlated with cognitive level, and ranged from .51 to.61.

The data revealed that the major change in perspective-taking success occurred between the concrete operational and transitional groups. While half the youngest group proved to be successful perspective-takers, 95% of the middle group were successful. Needless to say, the oldest group was 100% successful.

Discussion:

With respect to person perception ability, clearly the tendency to interpret

and infer psychological processes in others was most evident in the fully formal operational group. These subjects, whether spontaneously reconstructing stories, or adopting the Bystander or Protagonist role, were consistently more psychological and interpretive than either of the two less cognitively mature groups. It is important to underscore the finding that the major change occurred between transitional (mean age = 12.7) and formal subjects (mean age = 16.8). Convergent support for middle adolescence as a transitional period for socio-cognitive development may be found in the work of Selman and Barenboim among others. Most investigators of social cognition have found that physical events are understood 2 years before social events. Put differently, it appears that young adolescents can successfully apply their formal operations to physical phenomena considerably earlier than they can apply them to social phenomena.

The data also revealed that, when asked to adopt a particular perspective (Bystander or Protagonist), only the concrete operational subjects did not increase their use of Interpreting-Inferring statements. This finding is interesting in that it reveals something about the relationship between the development of person perception and perspective-taking. Transitional and formal operational subjects' adjustment of statement type suggests that they are able to not only decenter, or keep several versions of a psychological event simultaneously in mind, but these specific versions held in mind possess different degrees of depth depending upon the content. In other words, once perspective-taking abilities are firmly established and equilibrated during middle to late childhood, as the results of this research suggest, conceptions of the other exhibit greater organization, complexity and depth, characterized by references to covert psychological processes. This sophistication does not level off, however, in early adolescence, but continues to develop throughout the adolescent period, according to the results of this study.

With respect to the complex causal schemata posited by social attribution theorists, both transitional and fully formal operational subjects generated more

complex inferences than did concrete operational subjects. Eleven percent of transitional subjects' inferences and twenty-two percent of the formal subjects' inferences attributed to Bystanders were scored as complex. This finding is not out of the line with social attribution research using young adults, wherein simple explanations are modal (Kelley, 1973).

Simple inferences were dependent upon story content, but, unlike complex inferences, were independent of subjects' cognitive level. Moreover, within the category of simple inferences, "personal" inferences predominated. Subjects were all observers in this study, and in line with Jones and Nisbett's research in actor-observer differences, would be expected to generate fewer "situational" attributions.

To conclude, at least some support has been gained for the proposal inspired by Habermas, that the development of social cognition encompasses a detailing and integrating of commonalities between self and other as well as establishing important differences. Two lines of evidence are offered in support of this conceptualization. First, the developmental changes in complex inference construction observed in this study are indicative of the emergence and elaboration of rule systems in interpersonal cognition. While younger subjects' social causal reasoning typically lacked the complexity demonstrated by their more cognitively mature counterparts, their thinking could be clearly and reliably scored according to dimensions of internal causation (personal inferences) or external causation (situational inferences). This systematic search for and attribution of causal loci for behavioral outcomes suggest that explanations for the behavior of "the generalized other" are part of developing social cognitive repertoires in middle childhood. These assumptive psychologies most assuredly elaborate throughout development. Although the shift from simple to complex inference construction demonstrated reflects but one potential aspect of this elaboration, it is suggested that it might be constructively included in a developmental model of social cognition

Second, the development of person perception ability, assessed in this study by the ability to go above and beyond the behavioral stream of events, and infer or interpret covert psychological processes, is also offered as support for the proposed definitional expansion of social cognition. The development of person perception abilities throughout the course of adolescence may be similarly understood as an elaboration of subjects' assumptive psychologies. The results of this study suggest that an understanding of the contents of personality is most definitely a protracted developmental affair, and might be effectively included in a developmental model of social cognition.

The observed relationship between perspective-taking and person perception suggests that this development may be best characterized by a dialectical interplay of form and content. Both perspective-taking and person perception reflect cognitive functioning, but the developmental lines observed in this study indicate that person perception may constitute a content area for the application of perspective-taking abilities. Moreover, at each higher level of cognitive development, solutions to one socio-cognitive task reverberate in attempted solutions to the other.

Taken in totality, this research suggests the genesis of a more multifaceted but hopefully a more equilibrated and social approach to the study of social cognitive development.

References

Barenboim, C., 1978, The development of recursive and non-recursive thinking about persons, Developmental Psychology, 14, 419-420.

Blasi, A., 1975, Role-taking and the development of social cognition, Paper presented at the meetings of APA, Chicago.

Chandler, M.J. 1971, Egocentrism and childhood psychopathology: The development and application of measurement techniques, Paper presented at the biennial meetings of the SRCD, Minneapolis.

Chandler, M.J. 1976, Social cognition: A selective review of current research, In W. Overton and J. Gallagher (Eds.), Knowledge and Development, (volume 1), Plenum Press, N.Y.

Elkind, D., Barocas, R., Rosenthal, B., 1968,Combinatorial thinking in adolescents from graded and ungraded classrooms, Perceptual and Motor Skills, 27, 1015-1018.

Elkind, D., 1974, Egocentrism in children and adolescents, in Children and Adolescents, Oxford University Press, N.Y.

Flapan, D., 1968, Children's understanding of social interaction, Teacher's College Press, N.Y.

Habermas, J., 1975, Moral development and ego identity, Telos, 24, 41-55.

Jones E.E. and Nisbett, R.E., 1972, The actor and the observer: Divergent perceptions of the causes of behavior, in D. Jones, D. Kanouse, H. Kelley, R. Nisbett, S. Valins and B. Weiner (Eds.),Attribution: Perceiving the Causes of Behavior, General Learning Press, N.J.

Kelley, H.H., 1972, Causal Schemata and the attribution process. In E. Jones, D. Kanouse, H. Kelley, R. Nisbett, S. Valins, B. Weiner (Eds.), Attribution: Perceiving the Causes of Behavior, General Learning Press, N.J.

Selman, R., Jaquette, D., and Lavin, D., 1977, Interpersonal awareness in children: towards an integration of developmental and child clinical psychology, American Journal of Orthopsychiatry, 47, 2, 269-274.

Youniss, J., 1977, Socialization and social knowledge, Paper presented at the workshop, "Entwicklungspsychologie sozial-Kogniliver prozesse," Berlin, West Germany.